

**Nova Scotia Environment
Annual Accountability Report for the Fiscal Year 2009-2010**

Dated: July 2010

Table of Contents

1. Accountability Statement	1
2. Message from Minister	2
3. Introduction	3
4. Departmental Progress and Accomplishments	4
5. Financial Results	27
6. Measuring Our Performance	28
Appendix A - Organizational Chart	40
Appendix B - Agencies, Boards, Commissions and Tribunals	41

Dated: July 2010

1. Accountability Statement

The accountability report of Nova Scotia Environment for the year ended March 31, 2010, is prepared pursuant to the *Provincial Finance Act* and government policies and guidelines. These authorities require the reporting of outcomes against Nova Scotia Environment's business plan information for the fiscal year 2009-2010. The reporting of the Department's outcomes necessarily includes estimates, judgments and opinions by Nova Scotia Environment management.

We acknowledge that this accountability report is the responsibility of Department management. The report is, to the extent possible, a complete and accurate representation of outcomes relative to the goals and priorities set out in the Department business plan for the year.

Minister

Deputy Minister

2. Message from Minister

I am pleased to provide you with highlights of our achievements for the fiscal year 2009-2010 through our latest Accountability Report.

The new Nova Scotia Environment (NSE) was formed on April 1, 2008, and provided the Department an ideal opportunity to re-evaluate its business and strategically identify its goals and priorities. As a result, the structure of the Department's divisions were slightly modified in 2009-2010 as outlined below and in Appendix A, aligning with the five core business areas:

1. Climate Change Directorate
2. Environment and Sustainable Prosperity Partnerships
3. Environmental Monitoring and Compliance
4. Environmental Science and Program Management
5. Policy and Corporate Services

The 2009-2010 Business Plan set an ambitious agenda with key activities that included:

- Leading and championing the goals of the *Environmental Goals and Sustainable Prosperity Act* (EGSPA)
- Coordinating and implementing the *Climate Change Action Plan*
- Contributing to the province's *Better Regulation Initiative*
- Implementing the Department's *Winning Workplace Strategy*

With this agenda, we hoped to improve air quality, reduce greenhouse gas emissions, reduce the administrative burden for our clients and continue to be successful in recruiting and retaining high quality staff. I am pleased to say the Department has achieved or made significant progress on all priorities outlined in our 2009-2010 Business Plan.

With the many challenges facing the environment today, the Department's commitment to working better with its stakeholders and other government departments is reflected in the collaborative approaches taken on broad, cross-cutting issues as are outlined in this report. The Department recognized that integrated action is key to achieving real progress.

Sincerely,

Honourable Sterling Belliveau
Minister of Environment

Dated: July 2010

3. Introduction

This Accountability Report provides information on Nova Scotia Environment's (NSE) performance in relation to the goals, priorities, performance targets, and budget expenditure targets presented in its 2009-2010 business plan.

More detailed information on the results achieved by NSE in 2009-2010 can be found in:

- Section 4 of this report which outlines the results achieved in each of NSE's core business areas;
- Section 5 of the report which summarizes the financial results achieved in NSE for 2009-2010; and
- Section 6 of the report which presents the results achieved for the performance measures established for each of NSE's core business areas.

NSE's 2009-2010 business plan is available on our website at:
<http://www.gov.ns.ca/nse/pubs/docs/NSEBusinessPlan0910.pdf>

4. Departmental Progress and Accomplishments

NSE Strategic Goals

1. Achieve desired environmental outcomes
2. Cultivate partnerships and environmental stewards
3. Enhance service delivery
4. Develop dynamic instruments to deliver programs
5. Foster a winning workplace

There has been progress on each of the five strategic goals of NSE. Below is a detailed illustration of these achievements:

Strategic Goal #1: Achieve desired environmental outcomes

Nova Scotia Environment focuses on tackling climate change, protecting our environment, and advancing our ambitious environmental goals. Those goals are embodied in a number of pieces of legislation including the *Environmental Goals and Sustainable Prosperity Act*, *Environment Act*, *Wilderness Areas Protection Act*, *Special Places Protection Act*, and *Water Resources Protection Act*.

Planned activities in 2009-2010 include:

- The development of a comprehensive *Water Resource Management Strategy* to effectively manage all water resources in the province. The strategy will be drafted based on policy review and analysis of public feedback that was gathered in 2008. Consultation will be conducted with the public and stakeholders in the fall of 2009 with the draft strategy ready for finalization in 2010.

Response:

In 2009-2010, policy review and analysis was undertaken resulting in the drafting of a consultation document *Options for a Water Resource Management Strategy for Nova Scotia*. The document identifies options that NSE is considering for inclusion in the final strategy. Targeted consultation will be carried out in 2010 with key stakeholder groups and will enable NSE to ensure the final strategy balances both government and stakeholder priorities, gains public support, and identifies opportunities to leverage existing partnerships and future actions. In 2010, following the consultation process, NSE proposes to finalize the *Water Resource Management Strategy*, incorporating stakeholder feedback and reflecting budgetary capacity.

During the process of drafting the consultation document, the Interdepartmental Water Management Committee and its sub-committees continued to meet to discuss the

Dated: July 2010

options being proposed. Additionally, meetings and presentations to both internal and external stakeholders were completed. Formal consultation was initiated with the Mi'kmaq. A first meeting was held in November, jointly with the Wetlands Policy and Coastal Management Framework. This consultation process will continue into 2010.

- Ensuring that all *municipal drinking water supplies* are actively moving toward meeting the province's treatment standards. Currently about 60% of the province's 85 municipal drinking water supplies meet the provincial treatment standard, and it is anticipated that 90% will meet the treatment standard by December 2010, with the remaining 10% shortly thereafter. We will continue to work with municipalities to achieve full compliance and provide support for municipalities seeking rate increases through the Utility and Review Board.

Response:

As of March 2010, 65% of municipal water facilities met the current treatment standard. Of the 29 facilities not meeting the treatment standards, two are under investigation and enforcement actions have been issued to another eight. Many facilities have encountered delays related to land acquisition, construction issues or groundwater studies required to verify the wells are not under the direct influence of surface water (as occurred in Walkerton). It is forecast that 80% will meet the treatment standard by December 2010.

- Support municipalities in meeting the Canadian Council of the Ministers of Environment's Canada-wide strategy for managing *municipal wastewater effluent*. This strategy requires municipal treatment facilities in Nova Scotia to meet national performance standards for wastewater treatment. NSE will continue to work with municipalities so they can not only achieve at least primary treatment by 2017, but also align themselves with any additional targets following roll-out of the national strategy.

Response:

NSE has been consulting with our municipalities as we prepare to begin implementation of the Canada-wide strategy. We have conducted face to face meetings with municipal representatives to discuss their wastewater facilities and to increase understanding of how the strategy may affect them. NSE has prepared a project charter to establish a team to develop the tools and programs required to administer the Canada-wide strategy in our province. We will continue to provide updates to our municipalities and listen to their concerns through established stakeholder groups.

- Implement changes to the *Water and Wastewater Facilities Regulations and Public*

Drinking Water Supplies Regulations that have expanded the definition of a public drinking water supply to include licensed eating establishments, licensed day cares, commercial campgrounds and tourist accommodations with more than four rental units.

Response:

Staff are actively registering the expanded public drinking water supplies that meet the new definition of a public drinking water supply. An internal working group has also been formed to clarify program requirements for owners of public drinking water supplies. Education and outreach material will be prepared and information sessions will be held across the province to ensure owners understand their roles and responsibilities.

- Implementation of the *Climate Change Action Plan*, which was released in January 2009. This plan includes over sixty cross-department actions that will be implemented over the next five years. The Climate Change Directorate will be responsible for coordinating, monitoring, and tracking these commitments to ensure the province is on target to meeting its short, medium, and long-term targets. This will include:
 - developing a method of inventory and accounting for government Greenhouse Gas (GHG) emissions.

Response:

NSE has completed an inventory for GHG emissions for 2008 and has developed a method and guide for accounting for GHG emissions that will be transferrable to all government departments. Based on the inventory, the Department also completed a lighting retrofit of its offices replacing inefficient T-12 fluorescent lights with more efficient T-8 bulbs, saving the Department roughly \$20,000 annually in operating expenses. NSE is currently working on its 2009 inventory and is also assisting the Department of Transportation and Infrastructure Renewal as they complete theirs. Further plans for summer 2010 are to work with other departments and create standardized processes that can be adopted at later times.

- developing a discussion paper looking at the next phase of GHG emissions reduction policies and regulations.

Response:

In 2009, the province established hard greenhouse gas emission caps for the electricity sector as well as additional air pollutant caps to 2020. As part of this work, the climate change directorate has initiated the development of greenhouse gas emissions policies for sectors outside of electricity. Using the department's

Regulatory Management Framework, the directorate has been working on better defining the problem, and understanding of the sectors involved. From this work, options will be developed over the summer 2010 and key departments and stakeholders will be consulted to discuss options for moving forward with additional policies in the fall 2010.

- establishing a climate change adaptation fund to encourage the submission of competitive proposals to address pressing research needs.

Response:

The climate change adaptation fund was an action item in NSE's 2009 *Climate Change Action Plan*. It is expected to be a multi-year funding program which will grow according to demand. Its purpose is to fund adaptation projects proposed by the climate change directorate and project proposals submitted by municipal, academic, NGO and private industry groups to address pressing adaptation research needs. A package of resources has been developed to guide the implementation of the adaptation fund. Plans are to establish the fund in 2010.

- coordinating provincial, municipal and institutional collaboration to complete vulnerability assessments (flood, erosion and infrastructure assessments/maps based on future climate scenarios) for select NS pilot communities.

Response:

In February 2010, the \$8.5 million Atlantic Climate Adaptation Solutions (ACAS) project was formally initiated and federal and provincial funding has been provided to a number of collaborative projects. Much of the early work by NSE staff has involved setting up and coordinating the governance structure and administration of Nova Scotia's \$2.3 million funding allocation. Project work for 2010-2011 will mostly involve data collection and risk and vulnerability assessments for coastal flooding and change, inland flooding and water resources in six pilot areas across Nova Scotia. Project work in 2011-2012 will integrate these assessments and develop adaptation options and recommendations for community planning, infrastructure design and emergency management. Communications with the Atlantic provinces and other project partners will be ongoing throughout the life of the ACAS project, ending in November 2012. Thirteen municipal governments in Nova Scotia's six pilot areas will be key partners and recipients of the deliverables from this project.

An interdepartmental steering committee will be engaged later this year to oversee development of the provincial vulnerability assessment and progress report. This committee will be charged with developing terms of reference for the assessment, a

comprehensive framework to address all vulnerable aspects with respect to climate change impacts and adaptation in the province, and a methodology to assess and communicate these vulnerabilities. A key success factor for the vulnerability assessment will be to work with other departments to assist them in assessing areas of their jurisdiction vulnerable to climate change.

It is anticipated that the initial vulnerability assessment will be presented as a public report for release in 2012 with follow-up reports published every two years. These will compile updates on the latest projected climate impacts for Nova Scotia, compile and integrate a series of thematic assessments to present a holistic picture of baseline climate change related vulnerabilities in the province and provide policy direction for the province. Key deliverables will include documenting progress on adaptation in the province, monitoring the state of ongoing adaptation projects in the province and reporting on their progress, evaluating the success of adaptation efforts against vulnerability criteria, reviewing critical information gaps and exploring new media and alternative methods to communicate adaptation methodologies and results with other users to increase transferability.

- expanding web-based educational information and public awareness programs.

Response:

An expanded version of the main climate change web site is virtually complete and intended to be launched in early summer 2010. The expanded website includes new educational content, such as an online tool that will help Nova Scotians calculate their own carbon footprint. Technical work has also been completed on a new impacts and adaptation web portal, which will be accessed through the main climate change website. Further content development on impacts and adaptation is required prior to a public launch in 2010-2011.

- commissioning an economic assessment of Nova Scotia's GHG reduction.

Response:

The climate change directorate, in partnership with the Atlantic Canada Opportunities Agency (ACOA), commissioned a study by Gardner Pinfold, MK Jaccard and Associates Inc, and AMEC called *Climate Change and Carbon Regimes: Implications for Atlantic Canada and Nova Scotia*. The study looked at the macro economic impact of greenhouse gas policies in Atlantic Canada, and the macro economic impact of Nova Scotia's greenhouse gas emissions reductions targets of 10% below 1990 levels by 2020. The study concluded that the GDP impact of Nova Scotia's greenhouse gas target will likely be marginal. This study concurs with the conclusions of other national and international studies.

- Ensuring that *nitrogen oxide emissions* are reduced by 20% from 2000 levels, mercury

emissions are reduced by 70% from 2001 levels, and sulphur dioxide emissions are reduced by 50% from 1995 levels by 2010. While advances have been made, further cap reductions, as described in the Climate Change Action Plan, are planned. In addition, the Department will continue to work with NSPI to develop air emission reduction plans for mercury, and work will begin to develop a clear definition of "low-NOX" to be adopted by utility and industrial boilers.

Response:

NSE worked with Nova Scotia Power to ensure the nitrogen oxide target for 2009 was met, and other industry, along with Nova Scotia Power, to meet the sulphur dioxide target for 2010. Data for the nitrogen oxide target should be available toward the end of 2010 and data for the sulphur dioxide target will be available in 2011.

In August 2009, amendments were made to the Air Quality Regulations that added new caps for Nova Scotia Power for sulphur dioxide and nitrogen oxides for 2015 and 2020. The caps for 2015 will result in a 58% reduction in sulphur dioxide and a 28% reduction in nitrogen oxides. The caps for 2020 will result in a 75% reduction in sulphur dioxide and a 44% reduction in nitrogen oxides.

Work continued with Nova Scotia Power on developing the air emission reduction plans for mercury. Data is now available for 2009.

Work began on developing a clear definition of "low-NOX" to be adopted by utility and industrial boilers.

- Achieving the Canada-wide standard (CWS) for *ground-level ozone and airborne fine particulate matter*. The CWS establishes ambient objectives in Census Metropolitan Areas (CMAs) - areas with a population greater than 100,000. In Nova Scotia this includes Halifax Regional Municipality (HRM) and Cape Breton Regional Municipality (CBRM). In taking steps to implement the required monitoring and analysis to determine achievement of the CWS, required by 2010, enough measurements have been taken thus far to show that the metric for ozone is currently being met in both CMAs. In HRM, where sufficient data has been collected, the CWS metric for airborne fine particulate matter is being met. In 2009, the Department will complete the development of its CWS implementation plan that will describe actions to be taken to ensure CWS achievement, and continue to work to improve our monitoring capacity for ongoing achievement validation.

Response:

Data to calculate the Canada-wide standards for ground-level ozone and airborne fine particulate matter is being collected in HRM and CBRM. Data for 2009 is currently undergoing quality assurance/quality control and will be available by the end of August

2010. Previous data collected show that the metric for ozone is being met in both HRM and CBRM. In HRM, the CWS metric for airborne fine particulate matter is being met.

NSE has taken steps to continue to improve its air quality monitoring network so that compliance with the CWS can be measured. These steps include new monitors, increased maintenance of monitors, and increased automation.

The implementation plan that describes how the CWS will be achieved was completed and submitted to the Canadian Council of Ministers of the Environment (CCME) in October 2009. Nova Scotia's plan is now posted on the CCME website.

- Establishing a policy to prevent net loss of *wetlands*. In our effort to lead the development of a government-wide policy to prevent net loss of wetlands, NSE has prepared a work plan for creating a Wetland Conservation Policy. To assist us in reaching this target, an Interdepartmental Wetland Committee has been formed to provide government-wide input on policy development. The policy will strive to align with other jurisdictions.

Response:

A draft policy was completed in July 2009 and approved for public consultation in September 2009. Public consultations were completed from September 11 to December 21, 2009. Face-to-face meetings were held with 38 stakeholder groups which were attended by about 700 people. Numerous other teleconferences were held with individual Nova Scotians and stakeholders. We received 133 formal consultation responses comprising 325 pages of text. Consultation responses were summarized and analyzed during early 2010. Work continues to complete the policy development process and to align with other jurisdictions.

- Developing regulatory tools to stimulate redevelopment of *contaminated land*. The tools will clarify liability, improve site management consistency and provide clarity regarding process. The Department, with targeted consultation, will continue to work on developing the supporting framework for contaminated site regulations that would maintain or improve environmental protection while expanding investment and redevelopment opportunities.

Response:

The Department is currently developing regulatory tools to be completed by the end of the year 2010. In 2009-2010 much work has been conducted. There have been several consultation phases over the past year completed or underway including:

- A Deputy Ministers Advisory Committee of representatives of select stakeholder

- groups.
- Presentations to several targeted stakeholder groups and organizations.
- Release of a Public Discussion Paper and a supplementary, more detailed, Technical Discussion Paper to a broad stakeholder list. Comment period for both papers is open until July 31, 2010.

The results of all the consultation phases will be used to inform the policy analysis and regulatory tool development process.

- In 2008, NSE initiated the renewal of Nova Scotia's *Solid Waste Resource Management Strategy* in order to meet our new disposal rate target of 300 kilograms per person per year by 2015. We will continue to support the enhancement of the renewed Strategy in 2009 through work on new product stewardship initiatives and the development of a construction and demolition waste action plan. Additionally, programs to reduce the use of disposable products, discourage litter and reduce waste will be promoted and strengthened, as will our efforts to improve compliance.

Response:

In 2009, NSE released the Consultation Summary Report. The report expressed the input received by the Department during the stakeholder consultation on the renewal of the strategy. Priorities identified during the consultation process were incorporated into this work, with the assistance of the Strategy Renewal Advisory Committee. Work continues on this initiative.

The Construction and Demolition Advisory Committee concluded their work with recommended actions, which were incorporated into the strategy work, with plans to finalize the strategy in 2010. The intent is for the strategy to provide a road map on how Nova Scotia can continue to be a leader in waste management by reaching the *EGSPA* target of 300 kg/person/year by 2015.

- Continue work toward *protecting 12% of the province's total land mass* by 2015. At the end of 2008, a total of 8.23 per cent of the province is legally protected in nature reserves, wilderness areas, land trusts, conservation easements and national and provincial parks.

In 2009-10, we will:

- Continue work to designate and consult on three new wilderness areas, 15 nature reserves and to add 10 parcels to existing wilderness areas as committed by the government.

Response:

Three new wilderness areas were designated in 2009-2010: *Shelburne River Wilderness Area* - (2,267 ha); *Blue Mountain-Birch Cove Lakes Wilderness Area* (1,312 ha); and *Ship Harbour Long Lake Wilderness Area* (14,730 ha). Work on the legal designation of new nature reserves and wilderness area additions is continuing, including ongoing discussion with private land owners.

- Support the work of the Nova Scotia Crown Share Land Legacy Trust, the Nature Conservancy of Canada and the Nova Scotia Nature Trust in acquiring important conservation lands and in promoting private land conservation.

Response:

The Department has continued to support private land conservation efforts in 2009-2010. The Department provided support for the acquisition of lands by the Nova Scotia Nature Trust through the Lands and Legacies Conservation Partnership. Nova Scotia Environment was also active as liaison and Chair of the Scientific Advisory Committee for the Nova Scotia Crown Share Land Legacy Trust. The Trust was instrumental in supporting several land acquisitions, including the purchase, by the Nature Conservancy of Canada, of 12 exceptional conservation properties (1,485 hectares) in Shelburne and Yarmouth Counties.

- Amend the *Wilderness Areas Protection Act* to address Off Highway Vehicle (OHV) use and management in consultation with the OHV Advisory Committee.

Response:

The *Wilderness Areas Protection Act* was amended through Bill 50, which received Royal Assent on November 5, 2009, followed by proclamation on January 19, 2010. These amendments address key aspects of the use and management of off-highway vehicles in wilderness areas, and received full consensus support from the OHV Advisory Committee.

- Initiate a review of the *Special Places Act* to improve compliance and to clarify roles of both NS Environment and Tourism, Culture and Heritage.

Response:

A review of the *Special Places Protection Act* has been initiated. Immediate issues related to enforcement are being addressed with the assistance of the Department of Natural Resources. Discussions between NS Environment and Tourism, Culture and Heritage have also been initiated to work towards conducting a joint review of the legislation.

- Review the work of the Colin Stewart Forest Forum and initiate an interdepartmental government review of a province wide system of potential protected areas and mitigating measures for the forest industry with the Department of Natural Resources.

Response:

Government received the final report of the Colin Stewart Forest Forum (CSFF) in November 2009. The Department released the report to the public on December 22, 2009, along with an announcement of the provincial process to move towards the 12% protection goal. To facilitate this work, Nova Scotia Environment and the Department of Natural Resources established a 12% Working Group, made up of senior staff and officials from both departments. Working through a Steering Committee and Technical Committee, this group is reviewing the work of the CSFF, and has initiated discussions with other government departments and the Nova Scotia Mi'kmaq to develop a conceptual protected areas plan and a forestry mitigation strategy.

- Respond to land acquisition opportunities which can contribute to the 12% target.

Response:

Nova Scotia Environment worked with the Department of Natural Resources on The Large Land Purchase Program, valued at \$75 million, that was a highlight of the 2009 Budget. It was established to enrich Nova Scotia's environment, boost the economy and help the province reach its goal of protecting 12% of Nova Scotia's land mass by 2015. This initiative resulted in the acquisition of more than 57,000 hectares (140,000 acres) of land, a significant portion of which will contribute to the province's conservation goals once final protection decisions are made.

- As part of our ongoing work on *biosolids management*, the Department will be revising its guidelines for the Land Application and Storage of Biosolids in Nova Scotia. The Department is also represented on a national Biosolids Task Group under the Canadian Council of the Ministers of the Environment (CCME) which is conducting investigations into biosolids chemistry, the greenhouse gas implications of biosolids management and policy instruments to encourage a nationally consistent biosolids policy and management approach.

Response:

The revised Guidelines for the Land Application and Storage of Biosolids in Nova Scotia were released in March 2010 and are now being adopted across the province. Nova Scotia continues to co-chair the CCME Biosolids Task Group and will participate

in a stakeholder consultations on a proposed nationally harmonized approach to biosolids management beginning this fall.

- The Department will develop a regulatory framework and best management practice for *pits* that will reduce administrative burden and ensure consistent environmental standards. Quarries will be addressed in future years.

Response:

During 2009-2010, the Department has undertaken a thorough analysis of the environmental, social and economic issues surrounding pits. Focus groups were held with a targeted group of stakeholders across the province to discuss some of the possible regulatory framework options for addressing the issues.

Based on the stakeholders' feedback and internal analysis, the Department is proceeding to update the existing regulatory framework. The Department will improve environmental protection, provide clarification on components of the Pit and Quarry guidelines, such as definitions, and reduce some of the administrative burden for pit owners and operators.

- The Department is seeking opportunities to harmonize our approach to domestic pesticide use with the Atlantic Provinces. To compliment these efforts, outreach and education will be conducted to ensure sufficient information is available on domestic pesticide products and their use.

Response:

The Atlantic provinces have discussed possible harmonization opportunities in dealing with non-essential/cosmetic pesticides. New Brunswick and Prince Edward Island have chosen to use a "banned list" approach to non-essential pesticides, while Nova Scotia has chosen to take a "permitted list" approach, which essentially achieve the same goal of reducing the amount of non-essential pesticides use. Due to the common goal, we will maximize all possible opportunities with respect to public education issues related to the cosmetic pesticide issue.

Strategic Goal #2: Cultivate partnerships and environmental stewards

The Department encourages and supports environmental stewardship by working on a wide variety of partnerships to enable environmental entrepreneurship and innovation.

Planned activities in 2009-2010 include:

- Develop and implement an *Outreach framework and policy*. NSE has elevated the priority of outreach and education as a mechanism by which the Department can actively engage audiences to build knowledge and foster stewardship principles. An Outreach and Engagement Policy and Outreach Framework have been prepared for the Department, and a work plan has been drafted and will be finalized in Spring 2009.

Response:

The Outreach framework and policy was completed and is now a resource for outreach and education efforts. In January 2009, two Water Education and Outreach officers were hired to develop, coordinate and implement water education and outreach programs across the province consistent with Departmental priorities and strategies. Key initiatives in 2009-2010 included developing curriculum activities on wetlands in cooperation with the Department of Education, delivering Project WET training to teachers and other educators in partnership with Environment Canada, and representing NSE on various committees and at various events around NS.

- Both the Department of Economic and Rural Development (ERD) and Nova Scotia Environment (NSE) understand the important role public procurement plays in contributing to the sustainable prosperity of the province. In 2008, NSE provided technical expertise and leadership in the area environmental impacts and considerations relating to the goods and services purchased by government. NSE worked with ERD to draft and consult on the *Sustainable Procurement Policy*, to develop initial purchasing specifications and guidelines, and to develop practical tools (e.g., website, training, listserv, etc.) to assist with the adoption and implementation of sustainable procurement. NSE will continue in this role to provide expertise and support the adoption of sustainable procurement within all government departments, agencies, boards and commissions (Appendix B). Further, where opportunities exist, NSE and ERD will collaborate to extend the principles of sustainable procurement, eco-efficiency and pollution prevention to the MASH (Municipal, Academic, School and Hospital) sector and government suppliers.

Response:

NSE worked with ERD to draft and consult on the Sustainable Procurement Policy, and in 2009 the policy was approved. NSE and ERD worked together to develop initial purchasing specifications and guidelines, and to develop practical tools (e.g., website, training, listserv, etc.) to assist with the adoption and implementation of sustainable procurement. NSE will continue to provide technical expertise in the area of environmental impacts and considerations relating to the goods and services purchased by government (especially related to toxic chemical reduction). NSE will also continue in this role to provide expertise and support the adoption of sustainable procurement within all government departments, agencies, boards and commissions (Appendix B). Further, where opportunities exist, NSE will assist ERD with the extension of the

principles of sustainable procurement, eco-efficiency and pollution prevention to the MASH (Municipal, Academic, School and Hospital) sector and government suppliers.

- Evaluate the *Nova Scotia Youth Conservation Corps (NSYCC)* to ensure maximum success. The NSYCC, established in 1989, is designed to preserve and enhance the environment, while providing local youth with work and skill development opportunities in the environmental field. The Department is conducting an evaluation of this program to monitor its success, expand current partnerships and develop new ones.

Response:

The Division conducted an evaluation of the NSYCC program and has proceeded with positive changes to the program. Work continues to monitor the success of this program and to expand current partnerships, as well as to develop new ones.

- Develop and implement an *Aboriginal Consultation Policy* that will assist staff in understanding Departmental aboriginal consultation obligations and help them to select the appropriate consultation methodologies. Draft guidelines are anticipated in early 2009 with rollout to follow.

Response:

The Department has worked with the Office of Aboriginal Affairs to ensure that staff have the necessary information and support to meet obligations related to Aboriginal consultation. Over 70 staff have received training in this area and the Department has developed a tool kit to assist staff in making decisions related to consultation with Aboriginal people.

- *Rejuvenate the Environmental Trust Fund* to provide a source of funding for projects that involve environmental research, management or conservation. The fund will provide an opportunity for Nova Scotians to engage in projects that will contribute to a healthy environment.

Response:

The Department of Justice continues to ensure that monetary rewards gained from successful environmental convictions are forwarded to the fund. Since the amounts are variable, the Department continues to actively work with various stakeholders toward securing long-term funding for the Environmental Trust that is predictable and consistent while transparent and accountable to Nova Scotians.

- In recognition of the growing importance of environmental health protection, NSE will continue to provide a supporting role in the implementation of an intragovernmental *Health*

Protection Plan to review and manage orphaned health programs within the province. We will continue our role as program delivery staff for Health Promotion & Protection (HPP) throughout 2009.

Response:

NSE worked collaboratively with the Medical Officers of Health and Environmental Health Consultants in investigating health hazards and responding to issues related to environmental health concerns.

NSE continued as an active member of the Joint Environmental Health Protection Committee (JEHPC). In 2009-2010, JEHPC focused its work on strengthening environmental health and addressing gaps in health protection programs by implementing the Environmental Health Renewal Project. A core team has been established to lead this project, the outcome of which will identify key elements of a comprehensive environmental health program.

Through its participation on a working group established by JEPHC, NSE supported the delivery of workshops to mentors of environmental health practicum participants. NSE continued to work collaboratively in 2009-2010 with Department of Agriculture and HPP to offer practicum training to students seeking a career in environmental public health inspection.

- Deliver year four of the *Environmental Home Assessment Program* to assess well water, septic systems and oil tanks of 1000 homes and provide financial assistance to qualified Nova Scotians to repair or replace failed septic systems. An additional 1000 home assessments and 200 septic repair grants are available for this upcoming year. In 2009-2010 we will be evaluating opportunities to expand this program.

Response:

In 2009-2010, year four of the EHAP program, 1000 home assessment visits were provided across rural Nova Scotia and 237 septic system repair grants were provided to lower income families. As of March 31, 2010, a total of 3400 home assessments and 793 septic repair grants have been provided to rural residents of Nova Scotia. Data is being collected from the Home assessments so we can measure progress in achieving program goals. Year one and two data are currently available and year three and four data are being collected. We are working with the environmental non-governmental organization (ENGO) contractors to improve data collection and speed electronic input in an effort to analyze information more efficiently.

- The Department will continue to support several key government initiatives throughout 2009-2010 including the *Coastal Management Framework*, the *Heritage Strategy* and the

Natural Resources Strategy. Support to these initiatives is lent through staff participation in inter-governmental working groups that serve to eliminate jurisdictional overlap and ensure all interests are represented to result in the best possible product with maximum impact.

Response:

The Coordinators Group, consisting of the coordinators for the Coastal Management Framework, Natural Resources Strategy, Wetlands Policy and the Water Resource Management Strategy, continued to meet on a regular basis. Exploratory discussions regarding joint consultation on the strategies and policies was undertaken resulting in joint consultation with the Mi'kmaq on the Coastal, Wetlands and Water initiatives through the formal Terms of Reference process. Additionally, opportunities for further collaboration were identified for 2010-2011.

The Department actively participates with the *Provincial Oceans Network* (PON) to coordinate communications and assist in the development of the *Strategy*. The State of the Coast Report was released in 2009 and PON members will assist in analyzing consultation feedback and public/stakeholder input to form the Coastal Management Framework.

In 2009-2010, Nova Scotia Environment continued as an active member of the interdepartmental Heritage Strategy working group. A key component of this work is reviewing the new Nova Scotia Interpretive Master Plan to identify opportunities to tell stories that reflect the natural and cultural history of Nova Scotia as represented in provincial wilderness areas and nature reserves.

Strategic Goal #3: Enhance service delivery

Nova Scotia Environment recognizes that there is always room for improving the manner in which our customers' needs are met. While we have made significant improvements in recent years, we will continuously evaluate new and emerging methods to discover opportunities for improvement.

Planned activities in 2009-2010 include:

- Reviewing current activities and programs that could utilize standards, best management practices and/or codes of practice in order to streamline processes and reduce turnaround times. In 2009, the target programs for review will be abattoirs, asphalt plants, salvage yards, and pesticides application, as they pertain to the *Activities Designation Regulations*.

Response:

Dated: July 2010

The abattoir program was reviewed and it was determined that there were several disincentives to achieving compliance including duplicate inspection processes with the Department of Agriculture, lack of clarity around rules and expectations, and a significant cost to gain the appropriate approvals. To address this, NSE is currently developing a set of guidelines for operators and working with the Department of Agriculture to gain efficiencies and potential cost savings.

NSE's Regulatory Management Process was applied to a review of the salvage yard program. It was determined that administrative burden on business owners and departmental staff could be reduced by streamlining the program. To address this, NSE is currently reviewing a proposal to introduce Standards for Salvage Yards in Nova Scotia, which would replace the current guidelines, provide clarity on the rules for owners/operators of salvage yards, and reduce administrative burden. The proposed Standard would maintain environmental protection requirements.

The Department had reviewed our current approval process for pesticide approvals and determined that there was an opportunity to streamline the process and reduce turnaround times. As a result, in 2009, NSE eliminated the formal review process by the Department of Natural Resources of forestry pesticide applications. The Department had previously commenced placing pesticide application information and copies of the pesticide approvals on the Departmental website in order to enhance public access to this information.

- Working towards reducing Departmental *administrative burden by 20%*. The Department is in the process of reviewing reporting and submission requirements for various programs. In 2009, efforts will be made to streamline some of these requirements.

Response:

The Department continues to work towards reducing Departmental administrative burden and is reviewing reporting and submission requirements for various programs. Many of the changes proposed involve filing documents electronically and conducting online fee payments which are dependent on the development of technology and resources available from Service Nova Scotia and Municipal Relations (SNSMR).

- Conducting a review of various *approval turnaround* times to identify areas for improvement or alternate methods of program administration in order to meet the government-wide requirement to establish new Service Standards.

Response:

Dated: July 2010

The Environmental Monitoring and Compliance (EMC) Division conducted a review of turnaround times for all of the approvals that they process. Upon the completion of the review, EMC was able to reduce the majority of turnaround times which were previously set to a 60 day alternate service standard, to either a 10 day service standard or a lower alternate service standard.

Strategic Goal #4: Develop dynamic instruments to deliver programs

Nova Scotia Environment is actively working to review and update Nova Scotia's environmental regulatory and non-regulatory systems and is looking for new approaches to achieve desired environmental outcomes. The Department and its partners must enhance capacity to ensure that policies and programs are developed, evaluated, and updated as required.

Planned activities in 2009-2010 include:

- The Environmental Assessment (EA) Branch is developing a *Geographical Information System* (GIS) application that will assist in both the early planning and subsequent regulatory review of large scale development projects that are required to undergo a provincial EA. The application will access geospatial data currently managed by a number of provincial government departments to help identify interactions of proposed developments with natural resources, protected areas, and areas of ecological, archaeological and social significance. The application will also be used to geographically record the location and footprint of all past, current and future projects that proceed through EA, to help track regional development trends and identify potential cumulative environmental effects.

Response:

Development of the Environmental Assessment Screening Application is complete and the application is currently in the testing phase with planned implementation in 2010-2011. Development and implementation is being supported by GeoNova and the Corporate IT Office (CITO). The application will establish a new model for sharing of GIS data within the provincial government over the internet.

- Implementing the final actions identified in the department's response to the *Auditor General Recommendations* of October of 2007. This will include:
 - An *Activity Tracking System* will be put in place to improve NSE's ability to track, manage and report on inspection and compliance activities. The system is currently undergoing testing by the Nova Scotia Business Registry, and implementation of the system is scheduled for April 2009.

Response:

The Activity Tracking System for the Environmental Monitoring and Compliance (EMC) Division was implemented in July 2009 and is being utilized by all EMC staff across Nova Scotia. The staff underwent eight weeks of training to ensure adoption of the new application (5 days for Inspectors, 3 days for Managers and CICs, 2 days for Administrative staff, and 3 days for Hydrogeologists and Engineers).

Quality Assurance and Quality Control reports have been developed with the assistance of the Nova Scotia Business Registry, which outlines the number of complaints, investigations, and enforcement activities that occur in each region.

The ATS Administrator can now provide managers with regular reports on what files are closed, what files remain open and for how long, how inspectors are adhering to inspection schedules, deficiencies that were found during inspections, and the status of corrective action.

- A *Quality Assurance /Quality Control Program* will be implemented on a sector of industrial activities and continue with two sectors per year to evaluate performance in various program areas. Based on these reviews, corrective measures will be put in place where necessary.

Response:

Quality Assurance (QA) is a continuous process of internal quality control, respecting the degree of compliance, with operational and administrative responsibilities.

There are five distinct phases to the Environmental Monitoring and Compliance (EMC) Quality Assurance process: (a) Identification and risk ranking of EMC activities; (b) Determine actions for the selected activity(s) and subject them to a risk ranking process; (c) Prepare review guides for selected actions and physical review of files; (d) Corrective action(s) if necessary; (e) Follow-up to determine effectiveness of corrective action(s).

Two Activities are selected each fiscal year to be subject to QA review. The On-site Sewage and Municipal Solid Waste activities were reviewed in 2009-2010 and for the fiscal year 2010-2011 waste water plants and septage programs will be reviewed.

- A *Well Auditing Program* will be implemented to ensure drinking water safety. As of January 1, 2009, two Well Auditor positions have been filled and over the next year they will work with the industry to begin the auditing function, gather data, and further shape the development of a long-term auditing plan.

Response:

Each year there were between 2,000-3,000 wells constructed in Nova Scotia. In 2009, the well auditors completed 238 well audits. Most of these audits were on wells which were previously constructed. NSE continues to work to ensure the long term success of the auditing program and is seeking to increase the number of audits undertaken while the well is under construction.

Strategic Goal #5: Foster a winning workplace

By ensuring recruitment and retention of skilled individuals who choose to work with Nova Scotia Environment as a way to make a difference, we will remain an informed, empowered, and valued workforce recognized for our contributions to ensuring that Nova Scotia's environment is healthy, well-managed, and supports prosperous communities. To achieve this goal, Nova Scotia Environment has developed a *Winning Workplace Strategy*. The strategy is in direct support of the *Corporate Human Resource Plan* and, as such, is laid out in the section that follows.

The activities that support the strategy fall into three priority areas and are as follows:

1. Maintaining and enhancing current regulatory, compliance and enforcement (technical and knowledge-based skill) training support and program delivery, including:
 - *Regulatory Management Training* (coordinated in partnership with Treasury and Policy Board) and *Inspections Investigations Prosecutions Foundations Training (IIPFT)* for inspectors.

Response:

Formal Regulatory Management training sessions in partnership with Treasury and Policy Board were held in 2009 and information on this initiative continues to be shared on a more informal basis. *Inspections Investigations Prosecutions Foundations Training (IIPFT)* for inspectors has been renamed *Enforcement Training*. This training continues to be offered twice a year.

- A *structured graduated training program* for inspectors will be completed in the Fall of 2009 to provide incremental training that combines the IIPFT training with other mandatory training (e.g. WHMIS, First Aid).

Response:

The graduated inspector training program, renamed the Development and Accountability Model, was launched on February 16, 2010. Implementation of this program is underway.

- Implementation of *Activities Tracking System (ATS)*, an electronic system that will give inspectors access to client records, an ability to share data between divisions, increase reporting capabilities, and help improve the quality and timeliness of client interactions.

Response:

The initial roll out of the ATS training was completed in the Fall of 2009. An ATS Training Strategy was completed in the Spring of 2010 to ensure a process for training new employees, to provide refresher training, and additional training when new enhancements to the system are completed.

2. Building foundational learning and development support systems, such as:

- An updated *training directory*, which will include all courses/programs relevant to NSE employees (e.g. general mandatory courses, mandatory courses for Inspectors, etc.).

Response:

A new revised edition of the Training Directory was completed in the Fall of 2009 and made available to employees.

- The *training inventory*, LearnNet, will be promoted as a learning portal for registration and tracking training that employees have received. In addition, work has already begun on the development of e-learning courses with the aim of piloting an e-learning course on LearnNet in 2009.

Response:

LearnNet is now promoted as the learning portal for the Department. Guides have been developed for staff to fully appreciate and use LearnNet as a means to register and track the training employees have received. A pilot e-learning project was initiated for one of the Inspector Training Program modules. Staff in Learning Services are also working with the Public Service Commission in developing an e-learning strategy for government.

- In the Spring of 2009, data will be collected from across the Department to determine staff strengths and development needs. This, in turn, will help with further development of programs, courses or development opportunities to meet the needs of

staff. A training *needs assessment* will also provide us with a snapshot of the talent currently within the Department which will assist us as we continue with workforce planning to build our talent management capabilities.

Response:

An automated talent management system was developed and launched in the Spring 2009 to support structured succession management activities in the Department. Employee competency assessments were completed, critical roles were identified and essential skills and technical training needs were collected. The data has been used to inform the development of divisional training models. NSE continues to look at the succession management process, focusing on priority areas for talent management.

3. Building the Talent Management framework, systems and processes through:

- Performance Management, Coaching and Rewarding for Performance
- Career Planning, Mentoring and Knowledge Transfer
- Talent Review, Critical Role Identification and HR Planning
- Leadership and Management Development
- Employee Development Assignments
- Employee-Driven Organizational and Cultural Initiatives

Over the past three years, the Department has supported the notion that in order for organizational and cultural change to occur and have a lasting impact, it must be embraced and driven by its employees. Three specific areas of focus and corresponding initiatives had been created to operationalize this idea: Healthy Workplaces, Diversity and Recognition. These initiatives will continue to move forward with the support of the NSE Winning Workplace Committee.

Response:

Performance Management, Coaching and Rewarding for Performance

To coincide with the performance management cycle and to support effective performance management and coaching in the Department, on-line modules were provided to staff through the Justice Learning Center. Individual and divisional workshops were also provided to support managers and staff.

Career Planning, Mentoring and Knowledge Transfer

An on-line self guided Career Development Planning module was developed and has

been made available to staff. The Department continues to offer individual career development plan support and guidance to managers and staff. To facilitate knowledge transfer, training aids and tools were developed to support the process and will be made available to staff to support informal mentoring activities. Also, structured mentoring is provided in part by the GoverNext group and within the Department's Development and Accountability model. The Department also has planned intranet enhancements which will see the use of social networking to enhance information exchange and informal learning.

Talent Review, Critical Role Identification and HR Planning

An automated talent management system was developed and launched in the Spring 2009 to support structured succession management activities in the Department. Employee competency assessments were completed, critical roles were identified and essential skills and technical training needs were collected. The data has been used to inform the development of divisional training models. The Department continues to provide HR planning, organizational design, process improvement and change management support.

Leadership and Management Development

The Department continues to support corporate Leadership Development programs by facilitating the candidate identification and nomination process, providing Hay 360 Assessment coaching and feedback to participants and career development planning advice and guidance to managers and staff. The Department is developing an on-line New Manager Orientation Program to supplement the 18 month corporate classroom training program - Success Through Managers - in order to provide essential operational training to managers upon appointment.

Employee Development Assignments

An automated talent management system was developed and launched in spring 2009 to support structured succession management activities in the Department. Employee competency assessments were completed and critical roles were identified in order to define and drive the creation of formal employee development assignments.

Employee-Driven Organizational and Cultural Initiatives

To operationalize the department's strategic goal of fostering a winning workplace, an employee advisory committee was created to provide program input and support for cultural initiatives in the Department. Initiatives focus on three specific areas: Healthy Workplaces, Diversity and Recognition. The Winning Workplace Committee continues to move forward with the administration of the Department's annual Minister's Awards

of Excellence initiative, ongoing support for healthy workplace activities, administration of a self identification survey to determine employment equity representation in the Department, and the construction of a quiet/wellness room for staff. The Committee also developed a promotional campaign to brand and promote the Department's winning workplace goal and completed the design of a support program to encourage staff to develop and participate in activities and events that define their winning workplace needs.

5. Financial Results

Nova Scotia Environment		
Program and Service Area	2009/10 Estimate (\$ thousands)	2009/10 Actual (\$ thousands)
Ordinary Revenues, Fees and Recoveries	\$6,058	\$5,819
TCA Purchase Requirements	\$1,546	\$559.8
Administration	\$1,032	\$803
Policy and Corporate Services	\$4,497	\$4,977
Environmental Monitoring and Compliance	\$12,021	\$11,678
Environmental Science and Program Management	\$24,965	\$23,176
Environment and Sustainable Prosperity Partnerships	\$524	\$746
Climate Change Directorate	\$1,295	\$1,201
Total Gross Program Expenses	\$44,334	\$42,581
Funded Staff (FTEs)	277.8	256.0

6. Measuring Our Performance

NSE Strategic Goals

1. Achieve desired environmental outcomes
2. Cultivate partnerships and environmental stewards
3. Enhance service delivery
4. Develop dynamic instruments to deliver programs
5. Foster a winning workplace

Strategic Goal #1: Achieve desired environmental outcomes

The Outcome: Clean and safe drinking water

Nova Scotia Environment (NSE) is committed to sustainable management and protection of the environment. A desired outcome in meeting this commitment is clean and safe drinking water.

The Measure:

Percentage of population served by municipal water supplies that meet the health-based criteria for microbiological quality, as stated in the Guidelines for Canadian Drinking Water Quality, at all times during the calendar year.

What Does The Measure Tell Us?

Approximately 60 per cent of Nova Scotians obtain their drinking water from municipal water supplies. Health Canada, together with provincial health and environment ministries, has established the *Guidelines for Canadian Drinking Water Quality*. This document specifies the health-based criteria for a number of parameters, including maximum acceptable concentrations for total coliforms and E.coli bacteria. NSE tracks the proportion of people serviced by municipal water supplies who have access to drinking water meeting the health-based criteria for microbiological quality. This measure helps to provide an overall picture of access to quality drinking water. It also helps to gauge the effectiveness of *NSE Guidelines for Monitoring Public Drinking Water Supplies* and the *Water and Wastewater Facilities and Public Drinking Water Supplies Regulations*.

Where Are We Now?

NSE's boil water advisory database provides a tracking system for municipal water quality based on the health-based criteria for coliform bacteria (in the *Guidelines for Canadian Drinking Water Quality*). In 2008-2009, 98.6 per cent of the population served by municipal water supplies received water meeting the health-based criteria for microbiological quality at all times during the calendar year. This result shows a slight improvement over the results from the previous year. Data is unavailable for 2009.

Where Do We Want To Be?

Our on-going target is to maximize the percentage of population served by municipal water supplies that meet the health-based criteria for microbiological quality. NSE is contributing to this outcome by implementing Nova Scotia's Drinking Water Strategy, supporting development of municipal water supply protection plans, and enforcing the *Water and Wastewater Facilities and Public Drinking Water Supplies Regulations*, including *NSE Guidelines for Monitoring Public Water Supplies*.

The Outcome: Clean air

Clean air is an essential component of a healthy environment as well as contributing to human health. Many contaminants affect Nova Scotia's air quality and the Department works actively to reduce them. Measuring the air emissions of sulphur dioxide, mercury, and nitrogen oxides helps to track the progress made toward this outcome, as described below.

The Measure #1:

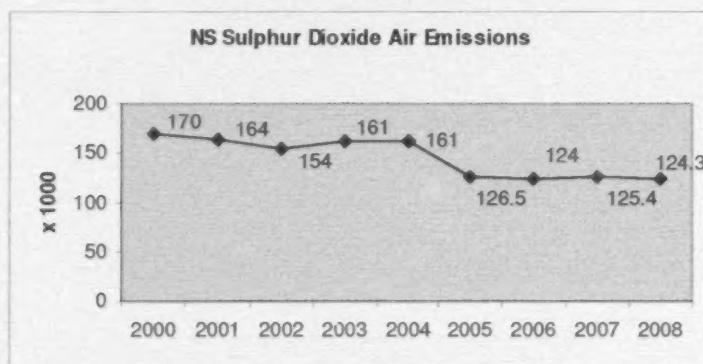
Annual total sulphur dioxide (SO₂) air emissions (tonnes) in the province.

What Does The Measure Tell Us?

Sulphur dioxide (SO₂) is a major contributor to acid rain and smog, and can have significant effects on human health if concentrations are elevated. Improved air quality is therefore partly dependent upon reduction in SO₂ emissions. Through reductions in SO₂ emissions, we are effectively working toward our clean air outcome.

Where Are We Now?

As indicated by the graph below, emission levels have declined since 2000. In 2005, the sulphur dioxide emissions cap was lowered from 189,000 to 141,750 tonnes. The 2008 emission total is well below the 2005 cap.



Rates are reported for calendar year, rather than fiscal. Estimates for 2009 will be available in late summer.

Where Do We Want To Be?

The *Environmental Goals and Sustainable Prosperity Act* has established a target of reducing the sulphur dioxide emissions by fifty per cent from sources existing in 2001 by the year 2010. Reductions will be accomplished by working with major industries to reduce SO₂ emissions through, for example, the use of lower sulphur fuels and process upgrades.

The Measure #2:

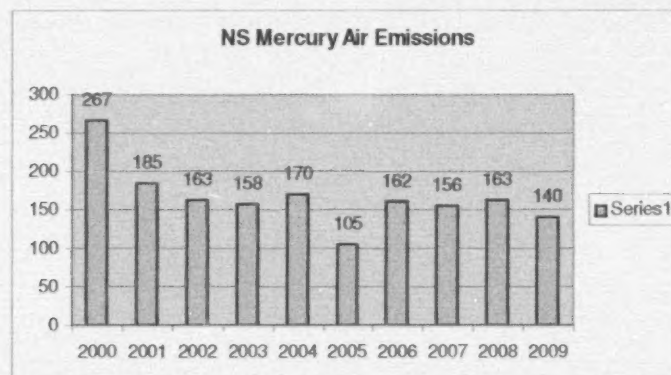
Annual total mercury (Hg) air emissions (kg) from electrical power generation in the province.

What Does The Measure Tell Us?

In Nova Scotia, mercury emissions are produced primarily by thermal electrical power generation. Mercury has serious effects on both human and environmental health. Through reductions in total mercury emissions, we are effectively working toward our clean air outcome.

Where Are We Now?

In 2005, an annual mercury emissions cap of 168 kg was established for Nova Scotia Power. The annual emissions of mercury have been below this target in each of the years since (and including) 2005. The total emissions by Nova Scotia Power in 2009 were 140 kg.



(*Rates are reported for calendar year, rather than fiscal).

Where Do We Want To Be?

The *Air Quality Regulations* were amended in 2005 and established an annual mercury emission cap of 168 kg, commencing March 1, 2005. This target has been met in the years since it came into effect. This target is consistent with the province's Energy Strategy and supports commitments in the New England Governors and Eastern Canadian Premiers Climate Change Action Plan. Nova Scotia adopted the new Canada-wide standard for mercury emissions from coal-fired power plants in 2006, requiring the mercury cap to be reduced to 65 kg in 2010. The *Environmental Goals and Sustainable Prosperity Act* established a goal that reflects the Canada-wide standard.

The Measure #3:

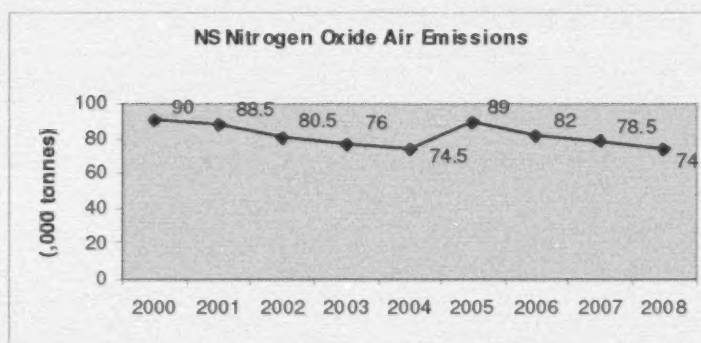
Annual total nitrogen oxide (NOx) air emissions (tonnes) in the province.

What Does The Measure Tell Us?

In Nova Scotia, nitrogen oxide (NOx) emissions are produced by a variety of sources, including thermal electrical power generation, industrial processes and the transportation sector. Nitrogen oxides are a pre-cursor to ground level ozone (which is a key component of smog) and acid rain, and therefore have serious environmental impacts. Through reductions in nitrogen oxide emissions, we are effectively working toward our clean air outcome.

Where Are We Now?

The NOx data shows a steady decline from the 2000 base year measure of 90,000 tonnes to 74,500 tonnes in 2004. The emissions data for 2005 was previously reported by Environment Canada to be 72,000 tonnes; however, Environment Canada has since reported the correct amount to be 89,000 tonnes. Current data shows an estimated rate of 74,000 tonnes for 2008, which indicates a decrease of 17.8% or 18,000 tonnes from 2000 levels. This is very close to our target of a 20% reduction by 2009. It should be noted that the 2008 data will not be verified until the end of 2010, and therefore may have to be modified in the Department's 2010-11 Accountability Report.



(*Rates are reported

for calendar year, rather than fiscal). Data unavailable for 2009.

Where Do We Want To Be?

The Department is targeting a 20 per cent reduction in nitrogen oxide emissions (from 2000 base year levels) by 2009, which sets our target at 72,000 tonnes of NOx. Nova Scotia Power's annual NOx emissions cap of 21,365 tonnes will also take effect in 2009 and is the only regulated cap for NOx. This target for NSPI is also in EGSPA. Our strategy is to work with major industrial sources to reduce emissions, and require the use of low NOx burners for new and upgraded facilities. Federal initiatives on cleaner vehicles, engines and fuels will also contribute to NOx emission reductions.

The Outcome: Protected Natural Areas

Nova Scotia Environment is committed to sustainable management and protection of the environment and natural areas. A desired outcome in meeting this commitment is establishing and maintaining a network of protected natural areas.

The Measure: *Total hectares of land protected through NSE program options.*

What Does The Measure Tell Us?

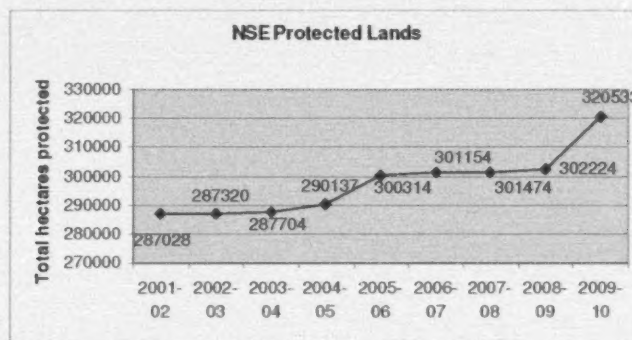
Protected areas are representative examples of the province's natural landscapes as well as sites and features of outstanding natural value. The Department supports a number of program options for protection, including:

1. Designation of Wilderness Areas and Nature Reserves.
2. Acquisition of Department priority properties through partnership programs.
3. Protection of Crown lands in collaboration with the Department of Natural Resources.
4. Voluntary private stewardship for significant lands.

Measuring the hectares of provincial land protected through Department programs helps track the progress made in meeting provincial and national commitments to establish systems of protected areas. This measure also provides an indication of the state of biodiversity conservation in the province, as protected areas provide habitat for a wide range of species.

Where Are We Now?

In 2009-2010, the Department protected a total of 320,533 hectares throughout the province. This represents an increase of 33,505 ha compared to the base year measure (2001-2002). The designation of one new wilderness area on land purchased from Bowater Mersey Paper Company (Shelburne River Wilderness Area - 2,267 ha), combined with the designation of two new wilderness areas on Crown land (Blue Mountain-Birch Cove Lakes Wilderness Area - 1,312 ha; Ship Harbour Long Lake Wilderness Area - 14,730 ha) account for the 18,309-ha increase in protected land in 2009-2010.



Where Do We Want To Be?

The *Environmental Goals and Sustainable Prosperity Act* has established the target to legally protecting twelve per cent of the total land mass of the Province by 2015.

The Department is proceeding with the process to designate additional Wilderness Areas and Nature Reserves. We have established a 12%, or 663,360 hectares, by 2015 process with Department of Natural Resources and key partners to meet this target, and are on track with this process. We will also continue to work with industry and land conservation groups to identify and protect new sites on private land.

The Outcome: Responsible waste management

Nova Scotia Environment is committed to sustainable management and protection of the environment and natural areas. Environmental management is most effective when responsibility is shared across all sectors and levels of society. Two measures are used to track progress in this regard. The first helps to gauge community participation in waste diversion. The second indicates Nova Scotia's success in keeping various materials out of landfills.

The Measure#1:

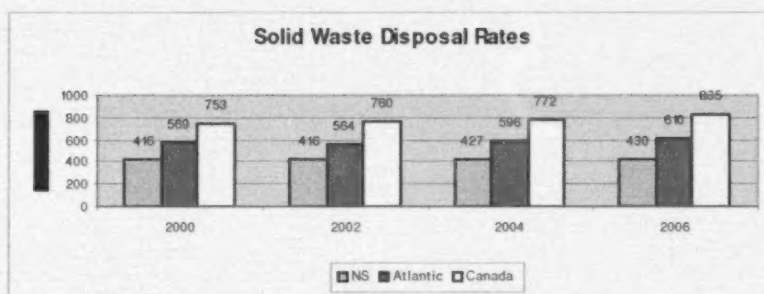
Annual municipal solid waste disposal rate per capita (Kg/person) compared with the regional and national disposal rates.

What Does The Measure Tell Us?

Communities share responsibility for environmental management through efforts like managing solid waste responsibly. Nova Scotia is working actively to ensure community participation in reuse, recycling, composting, and other waste management initiatives. The average amount of waste discarded by each person per year is an indicator of the level of participation in waste diversion programs. Low disposal rates suggest that more material is being diverted from the waste stream, either through reduction at source, reuse, recycling or composting. By comparing disposal rates in Nova Scotia with those of the Atlantic Region and Canada as a whole, we can assess Nova Scotia's performance, relative to the rest of Canada.

Where Are We Now?

Statistics Canada reports provincial solid waste disposal data every two years with a delay of approximately two years. As the graph indicates, the national per capita disposal rate in 2006 was 835 kg per person. In Nova Scotia, we disposed of just over half this amount in 2006, at 430 kg per person. The figures for 2008 should be available from Statistics Canada in late summer.



Source: Statistics Canada

(*Rates are reported for calendar year, rather than fiscal).

Where Do We Want To Be?

We will continue to maintain a disposal rate well below the national disposal rate. The *Environmental Goals and Sustainable Prosperity Act* has committed to an even more ambitious disposal target of 300 kg of waste per capita by 2015. The Department will support this goal through improved construction and demolition waste reduction/diversion, extended producer responsibility, research and development, continued public education, and compliance with the *Solid Waste-Resource Management Regulations*.

Strategic Goal #2: Cultivate partnerships and environmental stewards

The Outcome: Proactive environmental management

Nova Scotia Environment is committed to sustainable management and protection of the environment and natural areas. Proactive environmental management - addressing potential environmental issues before the environment is damaged - is a desired outcome in meeting this commitment.

The Measure #1:

Total number of business sectors and municipalities participating with NSE in environmental management and/or pollution prevention programs and initiatives.

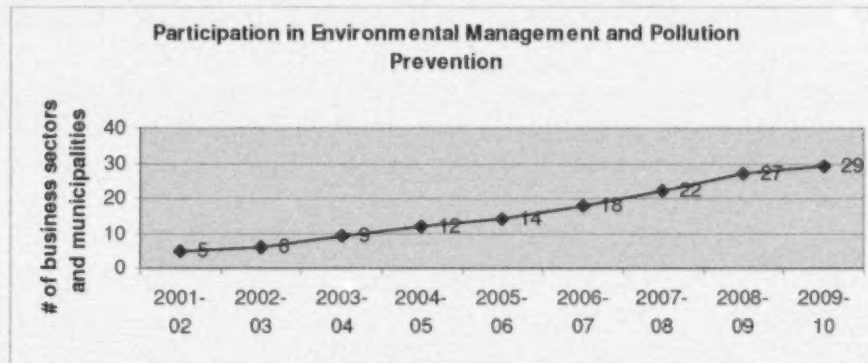
What Does The Measure Tell Us?

NSE works actively with business sectors and other levels of government to incorporate sustainable environmental management into their operations through the use of pollution prevention plans, environmental management systems, best management practices, and other environmental management tools. This cooperative approach has helped to minimize the long-term environmental impacts of business and municipal operations. In 2010, the Pollution Prevention Program evolved into the Toxics Reduction Initiative in response to increased interest and demand in this area. As such, the target to increase the number of business sectors and municipalities participating in these types of initiatives is no longer representative of the focus of the work being completed.

Dated: July 2010

Where Are We Now?

In 2009-2010, the total number of sectors participating with NS Environment in environmental management and/or pollution prevention programs and initiatives increased to 29. We are continuing to provide support to a number of groups already counted and in 2009-2010 the transportation sector (car sharing) and the Manufacturing/Processing Sector were added. In summary, from 2001 to 2009, the department has worked with 29 business sectors and organizations in proactive environmental management. In 2009-2010, the Toxics Reduction Initiative has completed a survey with targeted sectors of small and medium sized businesses in Nova Scotia. Results indicate that companies are generally interested in chemical reduction and substitution of hazardous chemicals with safer alternatives. Initial investigation of tools and resources focusing on toxics reduction for small businesses has been initiated.



Where Do We Want To Be?

The target to increase the number of business sectors and municipalities participating in these types of initiatives is no longer representative of the focus of the work being completed in the Pollution Prevention Program. For example, the Department has assisted the Eco-Efficiency Centre in becoming the primary non-profit environmental technical assistance provider and program delivery agency for businesses in Nova Scotia and, as such, our direct and regular strategic involvement with small business has been reduced. Additionally, programs and organizations have been developed to deal with environmental performance in municipalities and government departments. Technical assistance in the areas of sustainable procurement and hazardous chemical reduction is becoming the primary focus for the former Pollution Prevention Program.

The Toxics Reduction Initiative will provide tools and resources to assist small and medium sized businesses in Nova Scotia in their efforts to reduce potentially hazardous and toxic chemicals. The Non-essential Pesticides Control Act is the first initiative in this program.

The Measure #2:

Dated: July 2010

Number of environmental home assessments completed through Environmental Home Assessment Program (EHAP); number of septic repairs completed with funding from EHAP.

What Does The Measure Tell Us?

Over 400,000 Nova Scotians rely on private wells and on-site septic systems. Experience has shown us that many rural homeowners are not properly maintaining their septic systems and wells by not pumping out septic tank at the 3-5 year intervals; not testing their drinking well water; and dumping harsh chemicals and other materials down the drain that is harmful to the long life of the septic system. This measure will help to track the progress made by the EHAP program in providing Nova Scotians with the information and/or financial support they need to make environmentally friendly decisions and to protect the health of their families.

Where Are We Now?

In 2009-2010, year four of the EHAP program, 1000 home assessment visits were provided across rural Nova Scotia and 237 septic system repair grants were provided to lower income families. As of March 31, 2010, a total of 3400 home assessments and 793 septic repair grants have been provided to rural residents of Nova Scotia. Data is being collected from the Home assessments to quantify program criteria so we can measure progress in achieving program goals. Year one and two data are databased currently and year three and four data will be added. We are working with the environmental non-governmental organization (ENGO) contractors to improve data collection and speed electronic input in an effort to analyze information more efficiently.

Where Do We Want To Be?

The target is to complete 1000 environmental home assessments and 200 septic repair grants per year. This will be accomplished through our ENGO contracts delivering the educational component of the program, with ongoing program management and evaluation by NSE. As experience is gained over time and in the spirit of continuous improvement, consideration of program changes will be contemplated each year.

Strategic Goal #3: Enhance service delivery

The Outcome: Efficient and effective program delivery

Nova Scotia Environment is committed to sustainable management and protection of the environment and natural areas. A desired outcome in meeting this commitment is the delivery of efficient and effective environmental programs to clients. Two measures are used to track progress in this regard. The first measures the application of a risk-based inspection and auditing program and the second tracks average processing time for on-site sewage disposal system approvals.

The Measure#1:

Dated: July 2010

Reduced time spent by business on administrative requirements.

What Does The Measure Tell Us?

By calculating the time it takes for businesses to comply with our policies, procedures and programs, we can get a better sense of how easy or alternatively how difficult compliance with our laws is. Reducing time spent by business on administrative requirements is a commitment that government made under the *Better Regulation Initiative*. It is one of three measures government is using to assess the effort required to comply with laws in Nova Scotia.

Where Are We Now?

In 2009-2010, we achieved a cumulative total of 16.5% reduction in time spent by business on administrative requirements. Our target for this year was 20%. Many of the proposed administrative requirements changes were not reached as they involved filing documents electronically and conducting online fee payments which were dependent on the development of technology and resources available from Service Nova Scotia and Municipal Relations. Although we were unable to reach our target, we continue to work towards reducing the administrative burden for businesses and have incorporated the principles of the Better Regulation Initiative into our business practices.

Where Do We Want To Be?

Environment continues to work on reducing the time spent by business on administrative requirements. By reducing this time commitment, NSE will be making it easier for businesses to comply with our laws, while preserving environmental protections.

The Measure #2:

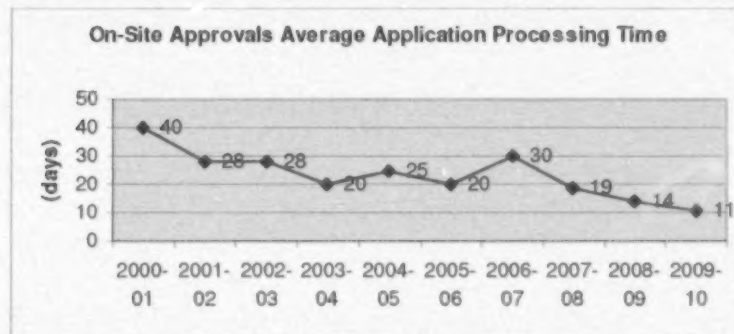
Average administrative time (days) to process applications for the approval of the installation of on-site sewage disposal systems.

What Does The Measure Tell Us?

The Department recognizes that while environmental protection is a priority, it must also provide timely service to its clients. When a proposed building project requires an on-site sewage disposal system, municipal units require that an approval for the installation of the system is issued from the Department prior to granting a building permit. Reduced turnaround times in the processing of on-site sewage disposal system approvals benefit developers and home builders by minimizing delays in obtaining their building permit and in construction.

Where Are We Now?

In 2009-2010, the average administrative time to process applications for on-site sewage disposal systems was 11 days. This is a significant reduction from our 2000-2001 base-year measure of 40 days, and well within our legislated time requirement of 60 days.



Where Do We Want To Be?

The target is to maintain average turn around time to 20 calendar days or less, which is in line with government standards for the turnaround times for applications. The Department will continue to exceed this standard through ongoing process re-design and improvement.

Strategic Goal # 4: Develop dynamic instruments to deliver programs

The Outcome: Quality tools, including regulatory tools

The Measure #1:

Compliance with a standardized, systematic development process

What Does The Measure Tell Us?

NSE has developed two processes to ensure that our regulatory and policy proposals are in compliance with the corporate Regulatory Management Policy. These processes establish a standardized, systematic method for staff to review issues and challenges facing the Department and help them to determine appropriate courses of action. These two processes, the Policy Analysis Process and the Regulatory Tool Development Process, ensure that all the principles in the corporate Regulatory Management Policy are considered.

Where Are We Now?

In 2009-2010, we set a target of 95% compliance with a standardized, systematic development process for regulatory tool development. We also committed to delivering two training sessions for NSE staff on our standardized regulatory development process. We achieved 100% compliance with the standardized process for regulatory tool development and delivered four training sessions which included representation from all the departmental divisions.

Where Do We Want To Be?

NSE has made tremendous progress in developing and implementing quality regulatory systems through the use of standardized processes. The processes have been demonstrated as effective and is now a part of the regulatory development culture.

The Outcome: Continual improvement of our regulatory programs

The Measure #2:

Percentage of regulatory programs with performance measures.

What Does The Measure Tell Us?

By putting performance measures in place in all our regulatory programs, NSE is committing to evaluating those programs to ensure they are achieving their desired results.

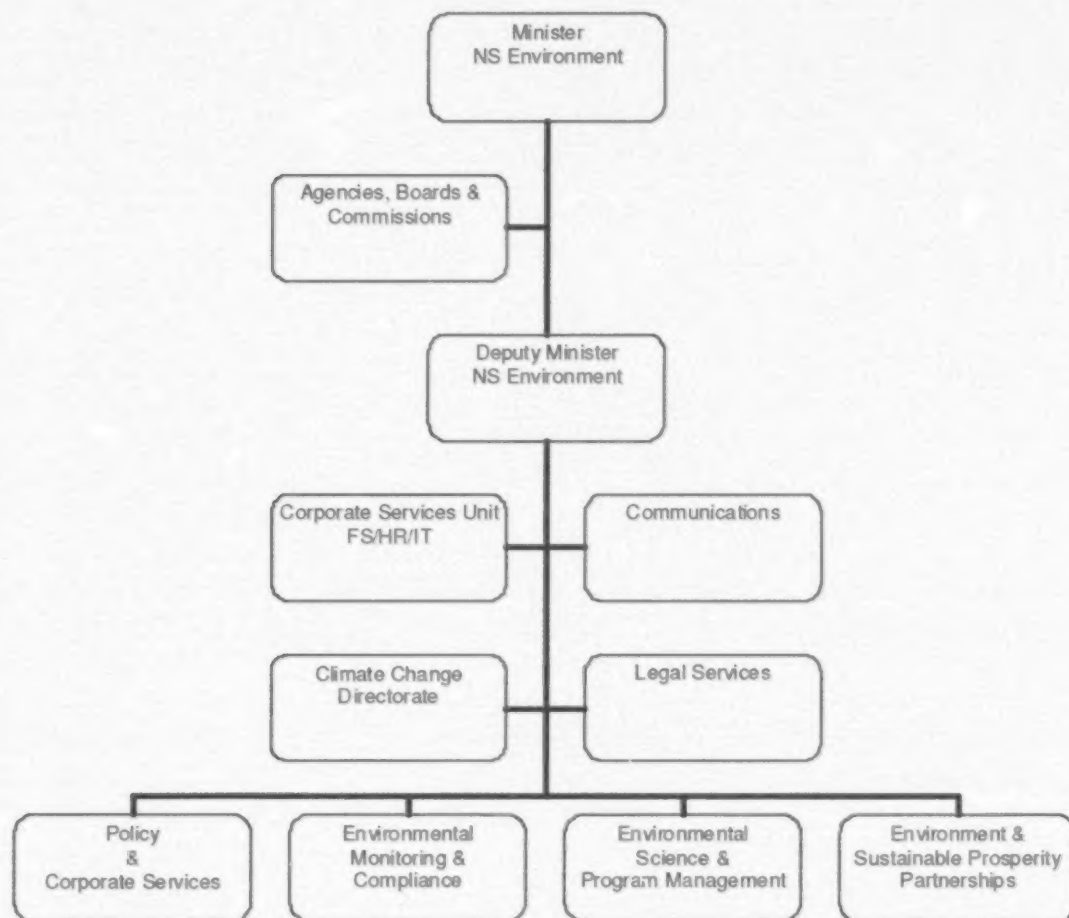
Where Are We Now?

Our target for 2009-2010 was that 90% of our regulatory programs identify measures. In this past year, we have surpassed that target for all new regulatory programs as 100% have performance measures.

Where Do We Want To Be?

The establishment and use of performance measures is now a standardized requirement in the Department's Regulatory Management Policy which is supported and monitored by the Policy and Planning Branch of the Department. One hundred percent of new regulatory programs will continue to have performance measures in the future.

Appendix A - Organizational Chart



Appendix B - Agencies, Boards, Commissions and Tribunals

- a. Advisory Committee on the Protection of Special Places
- b. Environmental Assessment Board
- c. Environmental Trust Fund Board
- d. On-Site Services Advisory Board
- e. Resource Recovery Fund Board
- f. Roundtable on Environment and Sustainable Prosperity
- g. Tar Ponds and Coke Ovens Remediation Monitoring Oversight Board

